

### **REMARKS**

This Application has been carefully reviewed in light of the Office Action mailed September 21, 2004. At the time of the Office Action, Claims 1-6 were pending in this Application. Claims 1-4 were rejected and Claims 5 and 6 were objected to. Claims 1 and 5 have been amended, and Claims 7-20 have been added to further define various features of Applicant's invention. Applicant respectfully requests reconsideration and favorable action in this case.

#### **Objections under 37 CFR 1.83(a)**

Examiner has objected to the drawings for failing to label all elements in the figures, specifically the Examiner requested Figure 2, item 212 to be labeled "Driver Circuit." Furthermore, the Examiner has required Figure 4 to be designated by a legend such as "Prior Art." Applicant has submitted replacement drawing sheets in response to the Examiner's objections, and respectfully requests Examiner to withdraw his objections.

#### **Specification and Claim Objections**

The Examiner objected to the disclosure due to informalities. Applicant has amended the specification according to the Examiner's recommendations to overcome these rejections.

The Examiner objected to Claim 6 as improperly depending on the objected Claim 5. Claim 5 has been amended to provide proper antecedent basis for Claim 6, thereby overcoming this objection.

#### **Double Patenting Rejection**

The Examiner has objected to Claim 5 under 37 C.F.R. § 1.75 as being a substantial duplicate of Claim 3. Claim 5 has been amended so that Claim 5 is no longer a substantial duplicate of Claim 3. Applicants submit, therefore, that the double patenting rejection has been overcome.

**Rejections under 35 U.S.C. §103**

Claims 1-4 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,561,384 issued to Daniel B. Reents et al. ("Reents et al.") in view of admitted prior art. In rejecting Claim 1, the Examiner relied on column 10, line 64-column 11, line 62 of Reents, which the Examiner asserts teaches configuring the pair of output transistors in one of a tri-state, active high or active low mode when the pair of output transistors is not enabled. The Office states that the output transistor pair corresponds to Reents Figure 4, elements 500 and 505.

Applicant submits, however, that when transistors 500 and 505 of Reents are not enabled, transistors 500 and 505 are in a tri-state. (See Reents, Figure 4 and column 11, lines 29-31.) Transistor 508 of Figure 4 may be optionally included to maintain a voltage at input/output pad 502 when neither transistor 505 or transistor 500 is active. (See Reents, column 11, lines 31-35.) Thus, the output transistor pair (500, 505) does not operate in any one of a tri-state, active high or active low mode when the pair is not enabled. Instead, transistor pair (500, 505) operates only in a tri-state mode when not enabled; Reents uses an additional transistor to put I/O pad 502 in an active high or active low mode (see Reents, Figure 4 and column 11, lines 45-55).

Inasmuch as the output pair of transistors disclosed in Reents is not configured to operate in any one of a tri-state mode, an active high mode, or an active low mode when the output pair is not enabled, Applicant submits that Reents does not teach or suggest "configuration bits causing the output control logic to configure the output pair to operate in any one of a tri-state, active high or active low mode when the pair is not enabled for PWM data output." Consequently, Reents does not teach or suggest, alone or in combination with other cited art, all of the elements recited in independent Claim 1. Applicant submits, therefore, that independent Claim 1 is in condition for allowance, and respectfully requests the Examiner to withdraw his rejection of independent Claim 1.

Inasmuch as Claims 2-6 depend from allowable independent Claim 1, Claims 2-6 are themselves allowable, which allowance is respectfully requested.

**New Claims 7-20**

*Claim 7*

Inasmuch as Claim 7 depends from allowable independent Claim 1, Claim 7 is itself allowable, which allowance is respectfully requested.

*Claims 8-13*

Claim 8 recites, generally, a processor comprising a plurality of pulse width modulation outputs and output control logic that configures respective PWM outputs to operate in a tri-state, active high or active low mode if the respective PWM outputs are not enabled for PWM data output. Applicant submits that Reents, alone or in combination with other cited art, does not teach or suggest a processor that uses configuration bits to configure respective PWM outputs to operate in a tri-state, active high or active low mode if the respective PWM outputs are not enabled for PWM data output. Consequently, Applicant submits that Claim 8 is in condition for allowance, which allowance is respectfully requested.

Inasmuch as Claims 9-13 depend from allowable independent Claim 8, Claims 9-13 are themselves allowable, which allowance is respectfully requested.

*Claims 14-20*

Claim 14 recites, generally, a method comprising receiving a plurality of configuration bits and configuring respective ones of a plurality of PWM outputs to operate in a tri-state, active high or active low mode in response to receiving the plurality of configuration bits. Applicant submits that Reents does not teach or suggest, alone or in combination with any other cited art, receiving a plurality of configuration bits, much less configuring pulse width modulated outputs to operate in a tri-state, active high or active low mode in response to receiving the plurality of configuration bits. Consequently, Applicant submits that Claim 14 is in condition for allowance, and respectfully requests such allowance.

Inasmuch as Claims 15-20 depend from allowable Claim 14, Claims 15-20 are themselves allowable, and such allowance is respectfully requested.

**Information Disclosure Statement**

Applicant encloses an Information Disclosure Statement and PTO Form 1449, with a copy of the references and a check in the amount of \$180.00, for the Examiner's review and consideration. These references were recently cited in a co-pending patent application.

**Change of Correspondence Address**

Applicant respectfully requests that all papers pertaining to the above-captioned patent application be directed to Customer No. **31625** and all telephone calls should be directed to Bruce W. Slayden II at 512.322.2606. Applicant also encloses a copy of the Revocation and Appointment of Power of Attorney and Change of Correspondence Address that were previously filed with the U.S. Patent and Trademark Office on September 10, 2004.

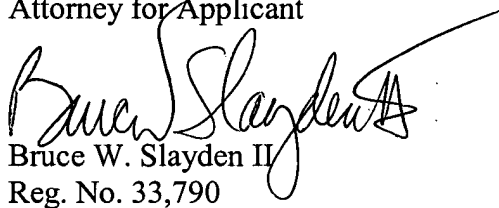
**CONCLUSION**

Applicant has now made an earnest effort to place this case in condition for allowance in light of the amendments and remarks set forth above. Applicant respectfully requests reconsideration of Claims 1-20 as amended.

Applicant believes there are no further fees due at this time, however, the Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-2148 of Baker Botts L.L.P.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicant's attorney at 512.322.2606.

Respectfully submitted,  
BAKER BOTTS L.L.P.  
Attorney for Applicant

  
Bruce W. Slayden II  
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SEND CORRESPONDENCE TO:

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Date: Dec. 20, 2004

### **DRAWING AMENDMENTS**

**In the Drawing:**

The drawings were objected to for failing to label all elements in the figures, specifically, in Figure 2, 212 should be labeled as Driver circuit. Please replace Drawing Sheets 2 and 4 with Replacement Drawing Sheets 2 and 4.